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| APPLICATION NO.              | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------|-------------|----------------------|---------------------|------------------|
| 10/678,876                   | 10/03/2003  | Minh Duy Khuc        | 1202a               | 1277             |
| 28004                        | 7590        | 06/21/2007           |                     |                  |
| SPRINT                       |             |                      | EXAMINER            |                  |
| 6391 SPRINT PARKWAY          |             |                      | PHAN, TRI H         |                  |
| KSOPHT0101-Z2100             |             |                      |                     |                  |
| OVERLAND PARK, KS 66251-2100 |             |                      | ART UNIT            | PAPER NUMBER     |
|                              |             |                      | 2616                |                  |
|                              |             |                      | MAIL DATE           | DELIVERY MODE    |
|                              |             |                      | 06/21/2007          | PAPER            |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/678,876

Applicant(s)

KHUC ET AL.

Examiner

Tri H. Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/8/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Communication(s)***

1. This Office Action is in response to the Application filed on October 3<sup>rd</sup>, 2003. Claims 1-28 are now pending in the application.

### ***Claim Objections***

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution (the claim number 22 is missing). When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 23-28 have been renumbered as 22-27.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re*

*Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-28 of the instant application are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-31 and 63-93 of U.S. Patent No. 6,731,744 (hereinafter refer as '1744'). Although the conflicting claims are not identical, they are not patentably distinct from each other, because claims 1 and 15 are broadened by omitting certain limitations ('..., receiving the SCP query ..., processing the SCP query ...,' etc. in the method claim or 'SCP' in the system claim) and where the distinctness is obvious variation between the terms, such as "packet address" of the invention's method claims with the "absolute address" of the patent 1744's method claims; "routing system" of the invention's system claims with the "network element system" of the patent 1744's system claims.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 6-7, 9-11, 13, 15-16, 20-24 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by **Doshi et al.** (U.S.5,483; hereinafter refer as '**Doshi**').

- Regarding claim 1, **Doshi** discloses in Figs. 1-7 and in the respective portions of the specification, *a method of operating the telecommunications network, which comprises*

*receiving signaling for a voice call* (for example see figs. 1 and 6-7; col. 4, lines 23-38);

*processing the signaling to generate a query to a call center* (for example see fig. 1; col. 4, lines 33-56; wherein the CO 25 generates a call set-up message 'IAM', e.g. "query", and send to the ATM switch 215, e.g. "call center", for setting-up an end-to-end connection between stations);

*transmitting the query to the call center* (for example see col. 4, lines 33-36);

*receiving a query response wherein the query response includes a packet address* (for example see col. 10, lines 13-24; wherein the TA receives the control instruction, e.g. "receiving a query response", which comprises the virtual circuit connection such as VCI, VPI values, e.g. "packet address", from the ATM switch to control port connection with the switch fabric as disclosed in col. 7, lines 33-42);

*transferring communications for the voice call to the call center in packets wherein the packets include headers having the packet address (for example see col. 7, lines 55-57; where the switch fabric of the ATM switch routes the cell, e.g. "packet", via the virtual circuit connection identified by the VC/VP identifier, e.g. "packet address", in the cell's header).*

- In regard to claim 2, 6-7, 9, 16 and 20-22, **Doshi** further discloses method for processing the query to identify the packet address based on *a caller number* ('ANI identifying the calling station') or *a called number* or *caller entered digits* ('the dialed telephone number'; wherein, it is inherently, the "geographic region" is provided in the dialed telephone number) as specified in the call set-up message 'IAM' in col. 4, lines 40-45.

- Regarding claims 10-11, 13, 23-24 and 26, **Doshi** further discloses, wherein the packet address comprises *a port identifier* ('input/output port addresses'; for example see figs. 3-4; col. 7, lines 30-42; col. 10, lines 13-19) or *a hardware address of the device used to receive the call at the call center* or *an ATM address* ('address of the switch'; for example see col. 9, lines 8-9; where the switch is an ATM switch, e.g. "ATM address").

- In regard to claim 15, **Doshi** discloses in Figs. 1-7 and in the respective portions of the specification, *a telecommunications system comprising:*

*a call processing system* ('CO 25, STP 28, EC 205, STM/ATM TA 210' in fig. 1; or related function elements in figs. 6 and 7) *configured to receive signaling for a voice call* (for example see figs. 1 and 6-7; col. 4, lines 23-38), *process the signaling to generate a query to a*

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*call center* (for example see fig. 1; col. 4, lines 33-56; wherein the CO 25 generates a call set-up message 'IAM', e.g. "query", and send to the ATM switch 215, e.g. "call center", for setting-up an end-to-end connection between stations), *transmit the query to the call center* (for example see col. 4, lines 33-36), *and receive a query response wherein the query response includes a packet address* (for example see col. 10, lines 13-24; wherein the TA receives the control instruction, e.g. "receiving a query response", which comprises the virtual circuit connection such as VCI, VPI values, e.g. "packet address", from the ATM switch to control port connection with the switch fabric as disclosed in col. 7, lines 33-42); *and*

*a routing system* ('CO 25, EC 205, STM/ATM TA 210, ATM switch 215' in fig. 1; or related function elements in figs. 6 and 7) *configured to transfer communications for the voice call to the call center in packets wherein the packets include headers having the packet address* (for example see col. 7, lines 55-57; where the TA and switch fabric of the ATM switch routes the cell, e.g. "packet", via the virtual circuit connection identified by the VC/VP identifier, e.g. "packet address", in the cell's header).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 3-5, 8, 12, 14, 17-19, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Doshi et al.** (U.S.5,483; hereinafter refer as '**Doshi**').

- Regarding claims 3-5, 8 and 17-19, **Doshi** discloses all the subject matter of the claimed invention as discussed in part 6 above of this office action, including process to identify the packet address based on *a caller number* ('ANI identifying the calling station') or *a called number* or *caller entered digits* or "*geographic region*" ('the dialed telephone number'); but fails to explicitly disclose about "*a time of day*" or "*a day of the week*" or "*a day of the week*" or "*load balancing statistics*" for identify the packet address. However, limitation such as "*a time of day*" or "*a day of the week*" or "*a day of the week*" or "*load balancing statistics*", which uses for identify the packet address, are just system choices for writing request to query in the program application as needed.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to combine limitation such as "*a time of day*" or "*a day of the week*" or "*a day of the week*" in the request of the **Doshi**'s call set-up message for the need(s) of the system, such as for billing, tracking call, load balancing, etc.

- In regard to claims 12, 14, 25 and 27, **Doshi** does disclose the "*port identifier*" or the "*ATM address*" in the packet address (wherein it is obvious that, with the assigned VCI/VPI values in the virtual circuit connection and port identified, the ATM switch does not need to translate for switching any more); but fails to explicitly disclose about "*MAC-layer address*". However, based on the requirement(s) and depend on system design/implementation, it is



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obvious that “*MAC-layer address*” can be implement in place of “*port identifier*” or “*ATM address*” as choices for the specific and designated system.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to implement limitation such as “*MAC-layer address*” in the **Doshi’s** connection control instruction as needed in the designed system, such as ISDN, Ethernet, etc.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Bjornberg et al.** (U.S.6,366,658), **Khuc et al.** (U.S.7,043,004 and U.S.2006/0146806), and **Malik, Dale W.** (U.S.6,415,027) are all cited to show devices and methods for improving the routing technique in telecommunication architectures, which are considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri H. Phan, whose telephone number is (571) 272-3074. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Chi H. Pham can be reached on (571) 272-3179.

**Any response to this action should be mailed to:**

**Commissioner of Patents and Trademarks**

Washington, D.C. 20231

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**or faxed to:**

**(571) 273-8300**

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tri H. Phan  
June 14, 2007

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER

6/18/07